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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,327

07/30/2003

Eitan Rosen

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08/07/2006

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EXAMINER

CHEN, TSE W

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,327

Applicant(s)

ROSEN, EITAN

Examiner

Tse Chen

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 23-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15, 23-28 and 30-37 is/are rejected.
- 7) ☒ Claim(s) 7 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07302003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-15 and 23-37 in the reply filed on July 6, 2006 is acknowledged.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on July 30, 2003 was filed before the mailing date of the first Office Action. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-3, 5-6, 11-14, 23-25, 27-28, 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Anzai, US Patent 6898722.

6. In re claims 1 and 23, Anzai discloses a circuit [fig.1], comprising associated means of:

- A clock transmitter [within 100] in communication with a clock bus [c], the clock transmitter to transmit a clock signal on the clock bus [fig.2c].
- A clock receiver [within 200] in communication with the clock bus, the clock receiver to receive a clock signal on the clock bus [col.5, ll.33-43].
- A driver [109] in communication with the clock bus, the driver to drive a voltage of the clock bus to a first voltage level [associated with completion signal] when the clock transmitter is not transmitting a clock signal on the clock bus and the clock receiver is not receiving a clock signal on the clock bus [col.5, ll.52-65; col.6, ll.28-38; drives bus to high indicating clock transmission is complete].

7. As to claims 2 and 24, Anzai discloses, wherein the first voltage level is a voltage level corresponding to a logical one [high] [col.5, ll.52-65].

8. As to claims 3 and 25, Anzai discloses, wherein the driver includes a resistance [inherently, circuitries comprise resistance in order to function properly].

9. As to claims 5 and 27, Anzai discloses, wherein the driver includes a transistor [col.1, ll.15-21; integrated circuitry].

10. As to claims 6 and 28, Anzai discloses, including enabling circuitry [108] in communication with the driver, the enabling circuitry to enable the driver [i=5 drives j high] when the clock transmitter is not transmitting a clock signal on the clock bus and the clock receiver is not receiving a clock signal on the clock bus [col.7, ll.18-35].

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11. As to claims 11 and 33, Anzai discloses, wherein the drive is included in a packet processor [fig.3] [col.6, ll.18-27; processing odd/even data packets].
12. As to claims 12 and 34, Anzai discloses, wherein the driver is included in a packet processor configured to transmit data and to receive data according to a double data rate protocol [col.5, ll.44-51].
13. As to claims 13 and 35, Anzai discloses, including a memory [103 and 207 constitutes a memory].
14. As to claims 14 and 36, Anzai discloses, wherein the memory is configured to transmit data and to receive data according to the double data rate protocol [col.5, ll.44-51].

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai as applied to claims 3 and 25 above, and further in view of Masuda et al., US Patent 5732249, hereinafter Masuda.
17. Anzai taught each and every limitation of the claim as discussed above. Anzai did not discuss details of the driver.
18. Masuda discloses a driver [fig.1] that includes a first resistance [r1] between the clock bus [1] and a voltage Vdd, and wherein the driver further includes a second resistance [r2] between the clock bus and ground.

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19. It would have been obvious to one of ordinary skill in the art, having the teachings of Anzai and Masuda before him at the time the invention was made, to modify the circuit taught by Anzai to include the driver explicitly taught by Masuda, in order to obtain the claimed circuit. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to control clock skew [Masuda: abstract].

20. Claims 8-10 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai as applied to claims 6 and 28 above, and further in view of Jeppesen III et al., US Patent 5355468, hereinafter Jeppesen.

21. Anzai taught each and every limitation of the claim as discussed above. Anzai did not disclose the receive processing clock to turn off in response to a signal from the enabling circuitry.

22. In re claims 8 and 30, Jeppesen discloses receive processing circuitry in communication with the enabling circuitry, the receive processing circuitry including a receive processing clock, the receive processing clock to turn off in response to a signal from the enabling circuitry [col.8, ll.3-6].

23. In re claims 9 and 31, Jeppesen discloses, wherein the enabling circuitry includes a flip flop [37].

24. In re claims 10 and 32, Jeppesen discloses, wherein the enabling circuitry enables the driver when the flip flop is in a first state [clip = high], and wherein the enabling circuitry disables the driver when the flip flop is in a second state [clip = low] [col.6, ll.11-19].

25. It would have been obvious to one of ordinary skill in the art, having the teachings of Anzai and Jeppesen before him at the time the invention was made, to modify the circuit taught

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by Anzai to include the teachings of Jeppesen, in order to obtain the receive processing clock that turns off in response to a signal from the enabling circuitry and the associated circuits. One of ordinary skill in the art would have been motivated to make such a combination as it provides a predictable and accurate way to control timing [Jeppesen: col.2, ll.6-9].

26. Claims 15 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai as applied to claims 13 and 35 above.

27. Anzai taught each and every limitation of the claim as discussed above. Anzai discloses another clock receiver [e.g., b] associated with the clock transmitter and driver [fig.6]. Anzai did not disclose explicitly that the clock transmitter and driver are to be “another” separate entity. Examiner hereby takes Official Notice that it is well known in the art to use another entity [i.e., additional clock transmitter and driver] for fault tolerant redundancy.

28. It would have been obvious to one of ordinary skill in the art, having the teachings of Anzai before him at the time the invention was made, to modify the circuit taught by Anzai to include additional clock transmitter and driver, in order to obtain the claimed circuit. One of ordinary skill in the art would have been motivated to make such a combination as it provides fault tolerant redundancy against single point failures.

Allowable Subject Matter

29. Claims 7 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. The following is a statement of reasons for the indication of allowable subject matter: the claims are allowable because none of the references cited, either alone or in combination

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discloses or renders obvious a circuit of claim 7 and 29, the enabling circuitry enables/disables the driver "when the clock transmitter is not transmitting a clock signal on the clock bus..."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tse Chen whose telephone number is (571) 272-3672. The examiner can normally be reached on Monday - Friday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tse Chen
July 19, 2006


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